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Fax: call to arrange

April 10, 2007

Sharon Ferguson Dept. of Commerce 87 – 7<sup>th</sup> Place East, Suite 500 St. Paul, MN 55101-2198 VIA: eFile and Sharon.ferguson@state.mn.us

RE:

Petition for Contested Case

Application of Kenyon Wind, LLC for a LWECS Site Permit

MPUC Docket No. IP 6605/WS-06-1445

Dear Ms. Ferguson:

I represent CFERS, LLC, a group of local landowners near the Kenyon Wind site. Enclosed is our Petition for a Contested Case in the above-entitled docket.

The project, proposed by Kenyon Wind, LLC, is to construct a 18.9 MW Large Wind Energy Conversion System. Because there are many potential and probable environmental and human health impacts associated with this project, we are requesting a contested case to address issues of material fact.

Please add my name, contact information above to the service list. Also please add to the service list:

Michael W. Chase President, CFERS, LLC 6201 – 480<sup>th</sup> St. Kenyon, MN 55946 (507) 789-5146 mwchase\_kenyon@yahoo.com

Very truly yours,

Carol A. Overland Attorney at Law

Enclosure

cc: John Daniels - j.danielsjr@worldnet.att.net

uland

Kenyon Wind, LLC 201 Ridgewood Ave. Minneapolis, MN 55403 Adam Sokolski – adam.sokolski@state.mn.us Dept. of Commerce 85 – 7<sup>th</sup> Place East, Suite 500

St. Paul, MN 55101-2198

# STATE OF MINNESOTA BEFORE THE PUBLIC UTILITIES COMMISSION

Leroy Koppendrayer Marshall Johnson Kenneth Nicolai Thomas Pugh Phyllis Reha Chair Commissioner Commissioner Commissioner Commissioner

In the Matter of the Application of Kenyon Wind For a Large Wind Energy Conversion System Site Permit for a 18.9 Megawatt Wind Farm in Goodhue County Docket No. IP6605/WS-06-1445

## PETITION FOR A CONTESTED CASE

Petitioners request a contested case in the above-captioned docket. Under Minn. R. 4401.0550, Subp. 5, any person may request a contested case on the site permit, and if the person making the request has raised a material issue of fact, the PUC shall order a contested case hearing. There are many potential and probable environmental impacts associated with this project, and many issues of material fact to be addressed in this contested case.

The material facts at issue where Applicant has not met its burden of proof include, but are not limited to:

## Demographics

• Environmental impacts analysis must consider the "most sensitive receptors." The area is more densely populated than a typical wind site in Minnesota – turbines are closer to property lines and the project does not offer sufficient setbacks from residences and property lines. The applicant has moved turbines several times to allow for minimal setbacks and secure wind rights over land of others. The applicant has not met its burden of proof to demonstrate that this is an appropriate site given the universe of possible sites, and there are material facts at issue regarding siting.

#### Noise

- There are material issues of fact regarding noise levels and whether the noise is annoying and/or
  has a health impact.
- Noise of the turbine has not been satisfactorily addressed and applicant has not met its burden of proof by demonstrating that the noise will not have an impact on neighbors. Noise levels and impact of noise is a material fact issue. The applicant plans to have setbacks of 800 feet from occupied buildings, but the standard in the state noise rule is "at the location of the receiver's activity." The siting map reflects the close proximity to homes and curtilage that comprises "location of receiver's activity." Neighbors to this project are very close to the turbines, and the modeling (App. P. 23) suggests noise will be at or above levels set by the state. Applicant's modeling is questionable given the methodology.
- Noise has health impacts the impact of the noise of wind turbines on human health is a material
  issue of fact. Exhibit A, Health Effects of Wind Turbine Noise, Pierpont, March 2, 2006; Wind
  Turbine Syndrome, Exhibit B, Pierpont testimony before New York State Legislative Energy
  Committee, March 7, 2006.
- Whether or not the noise is annoying is a material fact issue. The EQB has established precedent
  of mitigation of noise where levels are below the MPCA limits, but the noise is annoying. Under
  the rules:

Allowable noise levels for the operation of a shooting range are the levels determined by replacing the steady state noise L10 and L50 state standards for each period of time within each noise area's classification with a single Leq(h) standard for impulsive noise that is two dBA lower than that of the L10 level for stead state noise. The noise level shall be measured outside of the range property at the location of the receiver's activity according to Minnesota Rules, parts 7030.0010 to 7030.0080, as in effect on May 28, 2005. For purposes of this section, "Leq(h) means the energy level that is equivalent to a steady state level that contains the same amount of sound energy as the time varying sound level for a 60-minute time period.

Minn. R. 7030.0040.

In this application, no sound mitigation has been proposed. Consistent noise levels, though under the state's 55 dB(A) limit, have been found sufficiently "annoying" to justify noise mitigation.

Order point 2, EQB's Findings of Fact, Conclusions of Law and Order, Arrowhead Transmission Project, MEQB Docket No. MP-HVTL-EA-1-99<sup>1</sup>; see also ALJ Findings of Fact 21-25, and the Memorandum, Arrowhead Transmission Project, MEQB Docket No. MP-HVTL-EA-1-99. In the Arrowhead Transmission case, the substation noise was found to be "annoying" and below the MPCA thresholds – the annoyance was sufficient to require mitigation where the nearest house was within 2,000 feet.:

The evidence is that noise from this equipment will be both perceptible and annoying. MP pointed out that the existing noise was within the MPCA standards for residential areas. MP asserted that the resulting noise from the Arrowhead Project upgrade would fall within that limit and therefore no mitigation of noise impacts is required. MP claimed that there would be no perceptible increase in sound at the property line of the Arrowhead substation caused by the new equipment. That assertion is contradicted by the report and is not supported by facts in the record. The author of the study was unaware of the distance between the Arrowhead substation and the location of either the monitoring equipment or the adjacent homes. The nearest houses to the Arrowhead substation are well within 2000 feet. MP cannot rely upon a calculation of a noise impact on a location beyond the actual person hearing the sound to establish that there will be no substantial impact on that person.

MP also relies upon the MPCA standards as establishing the standard to be met in obtaining the exemption in this proceeding without conducting mitigation. The appropriate test for obtaining an exemption is not whether the MPCA noise limit is met. Rather, the test is whether a substantial impact will be caused by the new equipment. MP has failed to meet its burden to demonstrate that there will be no substantial impact on nearby residents without the inclusion of some noise mitigation at the Arrowhead substation. This noise mitigation can be accomplished by purchasing transformers that emit less noise. Noise mitigation may be accomplished by installing sound barriers that will reduce the overall noise impact of the Arrowhead substation. The reduction methods will reduce the noise created by the project to eliminate any substantial impact.

ALJ Findings of Fact 21-25, and the Memorandum, Arrowhead Transmission Project, MEQB Docket No. MP-HVTL-EA-1-99.<sup>2</sup> Because of the admittedly annoying characteristics of the substation noise, the utility was required to proceed with noise mitigation.

<sup>&</sup>lt;sup>1</sup> Available online at http://www.eqb.state.mn.us/Powerplant/Arrowhead/MP-HVTL-EA-1-99.html

Available online at http://www.oah.statc.mn.us/cases/arrowhead/arrowhead.rt.html

- Noise impacts have resulted in buyouts of neighbors of wind turbines, a response to the extreme
  nature of noise impacts. In 2001, Wisconsin Public Service bought out residents who raised
  issues of noise and strobing effects. Whether the noise is at a level requiring a buyout of
  landowners is a material issue of fact.
- Noise levels, proximity to neighbors and mitigation are material facts at issue. The applicant has
  not met its burden of proof because it has not sufficiently addressed noise from turbines, and has
  not demonstrated that the noise will have no substantial impact on nearby neighbors, and has not
  offered any noise mitigation plan.

#### Visual Impacts

• The impact of the shadows and reflections of the turbines, sometimes called "flicker," is a material issue of fact. The shadows and strobe effect is particularly notable during sunrise and sunset, and at other times depending on siting conditions. Turbines can have shadow and strobe impacts on nearby residents that range from a strobe that infiltrates their homes casting shadows throughout, resulting in migraines and other headaches, nausea, and even seizures. Residents living near turbines have tried to shut out the light with blinds and curtains, to no avail. Trees can block it, and have been used as mitigation. Applicant does not address strobe and shadows in the application, nor is mitigation addressed. Exhibit C, Testimony of Michael Chase before PUC, February 15, 2007. These are material issues of fact.

#### Public Services and Infrastructure

Traffic and roads, including sufficient space for on-site maneuvering and unloading space, boom
set up and area congestion and hazards are material issues. A specific hazard is the weight and
length of turbine delivery trucks, which require wider and sturdier roads than the township roads
often 25 feet or less. Applicant has not addressed the material issues of public and access road
construction, preservation, remediation of damage and compensation for damage.

- Infrastructure decommissioning, both funding and literal, are material issue of facts that have not been addressed adequately. Applicant has grossly understated decommission costs, and has proposed a decommissioning fund that does not start until after 7 years. A decommissioning fund should start immediately to assure that decommissioning costs are covered. The decommission fund can be assured with a decommissioning fund agreement. Exhibit D, Decommissioning Fund Agreement.
- Public safety, protection and indemnification of the public from damages, and public emergency response abilities and cost are material issues of fact. Local governments provide emergency response, and are not prepared, trained nor equipped to deal with turbine fires or malfunctions.

  Turbine breakdown and malfunction has occurred that puts close neighbors at risk, for example, Suzlon 2.1 MW turbines installed near Lake Wilson came apart and threw and dropped large pieces and parts:



Suzlon and Kenyon Wind, LLC, had agreed to produce Failure Modes and Effects Analysis (FMEA) and to date have not. In addition, there are field upgrades that should be made, i.e., a redundant braking system to prevent catastrophic failure from a runaway condition, as above. Exhibit C, Testimony of Michael Chase before PUC, February 15, 2007. The safety and soundness of the Suzlon turbines is a material issue of fact.

- Applicant claims the project will provide local tax revenues from a production tax, but the
  amount and recipient of the revenue is not disclosed. Whether the tax revenue generated
  outweighs the cost of emergency response services and public road work necessary due to the
  project is a material issue of fact.
- There are material issues of fact regarding impact of project on area use of airplanes and helicopters. Farmers in the area contract with spraying companies that use airplanes and helicopters for pesticide application the impact of the turbines on this necessary agricultural activity has not been addressed and applicant has not met its burden of proof that the project will not affect pesticide spraying. There is an unregistered airplane and ultralight landing strip near the proposed project on County Rd. 12, just west of the intersection of 12 and State Hwy. 57, on property owned by Jewel Ness. Applicant has not demonstrated that the project will not infringe on use of the landing strip. In addition, National Guard airplanes regularly fly quite low directly over the site, going from the metro area, to Rochester and back, for training. The impacts of the project on local use of airplanes and helicopters is a material issue of fact.
- Impacts of the project on radio, television and internet connections is a material issue of fact. The project area is one where cable is not required for reception. Wind turbines can produce shadowing on a TV screen, and decreased reception. A communications tower owned by Midwest Wireless is located on Highway 56 on the west side of the project area, and the wind project is located in between the tower and customers of Midwest Wireless and members of CFERS, and will likely attenuate the wireless signal. The impacts of the project on radio, television and internet connections have not been addressed and these are material issues of fact.

#### Geologic and Ground Water Resources - Surface Water and Flood Plain Resources

 The impact of the project on ditch easements and drain tile in the area is a material issue of fact, ranging from, protection of ditch and drain tile network to prevent damage, and the Applicant's plan to indemnify ditch easement holders and drain tile owners from damage to the system. The impact of the project on groundwater is a material issue of fact. The water table in the area is
very near the surface. Massive concrete foundations disturb waterflow and produce concrete
leachate. The Applicant has not demonstrated that installation and presence of the concrete
foundations will not harm the water in the area and have an impact on neighbors' wells.

#### Wildlife

• Applicant claims "wildlife habitat in the Projects (sic) area is of low quality" and states that "some impacts will occur," that "the only impact of concern to wildlife would primarily be to avian and bat populations," and that "[g]iven that the species commonly found in the Projects (sic) area are not of limited distribution or population, mortality associated with these collisions is not likely to result in impacts on a population scale." Avian impact is a material fact, and impacts have not been established. Eagles' routinely fly over the project area and nests have been sighted and recorded less than four miles from the project boundaries. Applicant has not acknowledged the presence of protected wildlife in the area nor demonstrated that the project will not have an impact on eagles and other wildlife, birds in particular. This hawk's nest is at 7060 – 480<sup>th</sup> Street, within the project boundary.



Eagles range widely, and are frequently seen overhead in the area proposed for the turbines, and an eagle nest has been found less than four miles from the site:



Impacts of wind turbines on protected wildlife and other wildlife, particularly birds, is a material issue of fact and impacts have been admitted, but prevention and mitigation has not been addressed by Applicant.

• Applicant has not addressed the material fact of impact of project on property values. Property values adjacent to wind turbines decrease, and in at least one case with WPS in Wisconsin, have resulted in utility buyouts of adjacent landowners. Other projects have utilized instruments such as "Property Value Assurance Plan" to protect nearby residents from financial impacts of the project on their property values. Exhibit E, Property Value Assurance Plan.

#### Stray Voltage and Ground Currents

• The application does not address stray voltage and ground currents, either expected levels or in planned mitigation, and these are material issues of fact. Stray voltage is an issue in the area, resulting in a \$450,000.00 verdict for Keith Cook, a dairy farmer in the southeast corner of Section 1 of Kenyon Township, within the project boundary. See Exhibit G, Cook v. Goodhue County Co-op Elec. Ass'n, 1993 WL 165663 (unpublished) (Minn. Ct. App. 1993). Whether the project will increase stray voltage and/or ground currents is a material issue of fact.

#### STATUS AS C-BED PROJECT

 Under the terms of the "C-BED" statute, Minn. Stat. 216B.1691, a project receives certain benefits, economic and procedural, if it meets certain criteria. There are material issues of fact as to whether the project, as proposed by Applicant, meets the C-BED ownership criteria. (f) "Community-based energy project" or "C-BED project" means a new wind energy project that:

(1) has no single qualifying owner owning more than 15 percent of a C-BED project that consists of more than two turbines; or

(2) for C-BED projects of one or two turbines, is owned entirely by one or more qualifying owners, with at least 51 percent of the total financial benefits over the life of the project flowing to qualifying owners;

Minn. Stat. §216B.1612, Subd. 2(f). Kenyon Wind, LLC, is the applicant for the 18.9 MW project, with "partner" Edison Mission Energy (EME). The applicant further claims that the project "will consist of 9 separate limited liability companies each owning one 2.1MW wind turbine." Application, p. 1. However, ownership is not detailed further, and the principals of the claimed LLCs must be disclosed to determine the material fact at issue whether this is a project that "has no single qualifying owner owning more than 15 percent of a C-BED project that consists of more than two turbines..." Id., Subd. 2(f)(1). Further, it is a material fact at issue whether it is "owned entirely by one or more qualifying owners, with at least 51 percent of the total financial benefits over the life of the project flowing to qualifying owners." Id., Subd. 2(f)(2). Wind projects in Minnesota have a long history of using LLC organizational structure to obscure the owners and investors of projects to qualify for benefits such as the state wind incentive payment, and this appears to be another such attempt.

# II. CONCLUSION

There are many issues of material fact that require a contested case hearing. CFERS, LLC, requests that the Public Utilities Commission refer this docket to the Office of Administrative Hearings for a contested case as contemplated by Minn. R. 4401.0550, Subp. 5.

Dated: April 10, 2007

Carol A. Overland

#254617

Attorney for CFERS, LLC OVERLAND LAW OFFICE

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# EXHIBIT LIST

Exhibit A, Health Effects of Wind Turbine Noise, Pierpont, March 2, 2006

Exhibit B, Pierpont testimony before New York State Legislative Energy Committee, March 7, 2006

Exhibit C, Testimony of Michael Chase before PUC, February 15, 2007

Exhibit D, Decommissioning Fund Agreement.

Exhibit E, Deposit Escrow Agreement

Exhibit F, Property Value Assurance Plan

Exhibit G, Cook v. Goodhue County Co-op Elec. Ass'n, 1993 WL 165663 (unpublished) (Minn. Ct. App. 1993).

# Wind Turbine Syndrome

# Testimony before the New York State Legislature Energy Committee

March 7, 2006

# Nina Pierpont, MD, PhD

MD, The Johns Hopkins University School of Medicine, 1991
PhD, Population Biology, Princeton University, 1985
BA, Biology, Yale University, 1977
Fellow of the American Academy of Pediatrics
www.ninapierpont.com

I am here to talk to you today as a physician-scientist about a clinical phenomenon called Wind Turbine Syndrome. This is relevant to today's hearing because it critically affects implementation of the RPS (Renewable Portfolio Standard) in terms of the siting of industrial wind turbines. Current siting practices (which are solely industry-driven) disregard public health. The supervision of the legislature—of this committee—is needed to create siting standards to protect the citizenry, all the citizenry, including citizens who are rural, old, ill, impaired, and very young.

Federal agencies are trying to put the brakes on willy-nilly wind turbine construction, citing, for instance, wildlife issues. The GAO (Government Accountability Office) last fall told US Fish and Wildlife to get involved. The National Academy of Sciences in April 2005 initiated a 20-month study on environmental impacts whose final report is due in December this year. There also needs to be a focus on human health, and the state needs to step up to the plate in terms of regulation.

I live in Franklin County, the poorest in NY State. Two years ago, after passage of the RPS, wind energy companies showed up there in force, as they have in all the poor, rural parts of the state. They showed up with no controls whatsoever, unregulated by either the legislature or NYSERDA (New York State Energy Research & Development Authority). Our town boards, made up of farmers, teachers, corrections officers, etc., were told, "You guys handle this," by our state representatives. I got involved as a responsible citizen and physician. Over the last 1½ years I have done a lot of reading, research, and interviews. I have spoken at town board meetings and before the St. Lawrence County Legislature, and published alone or with my husband (a retired university professor) numerous editorials and letters to the editor in local newspapers. My focus has been health issues and to some degree wildlife, in which I also have credentials in my PhD.

I get a lot of slander and abuse from the wind salesmen. Their favorites are saying that my abundantly referenced and footnoted articles, like the one before you (note: a separate handout), have "no evidence," or that I think wind turbines cause mad cow disease. The latter smear came from a town meeting in Ellenburg, NY, in October 2004, when I presented information culled from the medical literature on possible effects of low frequency noise. This included a paper out of the UK linking low frequency sound to prion diseases by a complex and highly speculative mechanism. I was very clear how speculative it was, but apparently the concept of something being speculative was over their heads, including over the heads of wind salesmen in the room.

I am not for or against the RPS. I'm an intelligent person and I support renewable energy. I am not here to shoot down wind energy, which probably has its place, though that place is not near people's homes or near schools, hospitals, or other locations where people have to sleep or learn.

I would like to stress that these are not "farms." One doesn't "farm" wind any more than one "farms" water in a hydroelectric dam or "farms" neutrons in an atomic plant. These are large, industrial installations. They make large-scale, industrial noise. "Jet engines" is the most common description I hear in surveying people—a jet engine that doesn't go away and which you can't get used to.

A syndrome in medicine is a constellation of symptoms and findings which is consistent from person to person. Defining a syndrome is the first step in investigating any new disease. The symptom cluster has to make sense in terms of pathophysiology-there has to be a plausible mechanism in terms of how the body and brain work. Defining a syndrome, and making that knowledge available to the medical community, lets other doctors go from scratching their heads over weird presentations of illness which are coming through their offices, to being able to validate and name what is going on and start to do something about it. It also opens the door to epidemiologic studies to define prevalence and risk factors, which will guide prevention and treatment.

Describing and documenting symptoms is the province of physicians. So is research on the causes of diseases. Deciding whether people have significant symptoms is not within the expertise of engineers or specialists in acoustics, even when the symptoms appear to be caused by noise. We physicians appreciate the noise data which engineers provide, but this data has nothing to do with whether people have symptoms or not. One British acoustics expert, Dr. Geoff Leventhall, is especially outrageous in this regard, insisting that people "can't" have symptoms because turbines "don't," he says, produce low frequency noise. His fallback, for which he is well paid by the industry, is that people make up their complaints. But he's not trained to distinguish whether people are making up their complaints, or to know about the range of physical, psychiatric, and neurological symptoms people might have. A related point: the hallmark of a good doctor is one who takes symptoms seriously and pursues them until they are understood (and ameliorated). This includes symptoms related to the brain, our most complex organ-symptoms which may be neurologic, psychiatric, or physical.

Three doctors that I know of are studying the Wind Turbine Syndrome: myself, one in England, and one in Australia. We note the same sets of symptoms. The symptoms start when local turbines go into operation and resolve when the turbines are off or when the person is out of the area. The symptoms

- Sleep problems: noise or physical sensations of pulsation or pressure make it hard to go to sleep and cause frequent awakening.
- 2) Headaches which are increased in frequency or severity.
- Dizziness, unsteadiness, and nausea. 3)
- Exhaustion, anxiety, anger, irritability, and depression. 4) 5)
- Problems with concentration and learning.
- 6) Tinnitus (ringing in the ears).

Not everyone near turbines has these symptoms. This does not mean people are making them up; it means there are differences among people in susceptibility. These differences are known as risk factors. Defining risk factors and the proportion of people who get symptoms is the role of epidemiologic studies.

Chronic sleep disturbance is the most common symptom. Exhaustion, mood problems, and problems with concentration and learning are natural outcomes of poor sleep.

Sensitivity to low frequency vibration is a risk factor. Contrary to assertions of the wind industry, some people feel disturbing amounts of vibration or pulsation from wind turbines, and can count in their bodies, especially their chests, the beats of the blades passing the towers, even when they can't hear or see them. Sensitivity to low frequency vibration in the body or ears is highly variable in people, and hence poorly understood and the subject of much debate.

Another risk factor is a preexisting migraine disorder. Migraine is not just a bad headache; it's a complex neurologic phenomenon which affects the visual, hearing, and balance systems, and can even affect motor control and consciousness itself. Many people with migraine disorder have increased sensitivity to noise and to motion—they get carsick as youngsters, and seasick, and very sick on carnival rides. Migraine-associated vertigo (which is the spinning type of dizziness, often with nausea) is a described medical entity. Migraine occurs in 12% of Americans. It is a common, familial, inherited condition.

To keep our balance and feel steady in space, we use three types of input: from our eyes (seeing where we are in space), from stretch receptors in joints and muscles, and from balance organs in the inner ear. At least two of these systems have to be working, and agreeing, to maintain balance. If the systems don't agree, as in seasickness or vertigo, one feels both ill and unsteady. Wind turbines impinge on this system in two ways: by the visual disturbance of the moving blades and shadows, and by noise or vibration impacting the inner ear.

Other candidate risk factors for susceptibility to Wind Turbine Syndrome are age-related changes in the inner ear. Five percent (5%) of otherwise healthy people from age 57 to 91 experience dizziness, and 24% experience tinnitus or ringing. Damage to the ears or hearing from other causes, such as noise exposure, is also a potential risk factor.

Inner car organs are closely linked, by proven neurological connections, to the brain systems which control mood, anxiety, and one's sense of well-being. Disturbing the inner ear disturbs mood, not because a person is a whiner or doesn't like turbines, but because of neurology.

Data from a number of studies and individual cases document that in rolling terrain, disturbing symptoms of the Wind Turbine Syndrome occur up to 1.2 miles from the closest turbine. In long Appalachian valleys, with turbines on ridge-tops, disturbing symptoms occur up to 1.5 miles away. In New Zealand, which is more mountainous, disturbing symptoms occur up to 1.9 miles away.

In New York State, with its mixed terrain, I recommend a setback of 1.5 miles (8000 ft.) between all industrial wind turbines and people's homes or schools, hospitals, or similar institutions. This setback should be imposed immediately for turbines not yet built.

The legislature might want to set up a panel of clinicians to review the data and medical information I refer to here, but until this happens, and as research continues, a moratorium on all wind turbine construction within 1.5 miles of homes would be appropriate.

To recapitulate, there is in fact a consistent cluster of symptoms, the Wind Turbine Syndrome, which occurs in a significant number of people in the vicinity of industrial wind turbines. There are specific risks factors for this syndrome, and people with these risk factors include a substantial portion of the population. A setback of 1.5 miles from homes, schools, hospitals, and similar institutions will probably be adequate, in most NY State terrain, to protect people from the adverse health effects of industrial wind turbines.

# Nina Pierpont, MD PhD

# Fellow of the American Academy of Pediatrics

# February 8, 2006

## Education

1991	M.D.	The Johns Hopkins University School of Medicine
1985	Ph.D.	Princeton University (Behavioral Ecology)
1981	M.A.	Princeton University (Behavioral Ecology)
1977	B.A.	Yale University, National Merit Scholar (cum laude)

# Post-Doctoral Training

1992 to 94	Pediatrics	Dartmouth-Hitchcock Medical Center, Lebanon, NH
1991 to 92	Pediatrics	Children's National Medical Center, Washington, DC
1985 to 86	Ornithology	American Museum of Natural History, New York, NY

# Licensure and Certification

1997	Licensed Physician, New York
1997	Licensed Physician, New Hampshire (expired)
1995	Pediatric Advanced Life Support Instructor and Affiliate Faculty
1994	Diplomate, American Board of Pediatrics (recertified 2000, expires 2008)
1994	Licensed Physician, Alaska (expired)

# Hospital or Affiliated Institution Appointments

10/00 to 12/03	Senior Attending in Pediatrics Bassett Healthcare, Cooperstown, NY
1997 to 00	Attending Pediatrician Alice Hyde Hospital, Malone, NY
1995 to 96	Chief of Podistrian V. J. K. Hospital, Malone, NY
32.74.000	Chief of Pediatrics Yukon Kuskokwim (Yup'ik Eskimo) Delta Regional Hospital, Bethel, AK Staff Pediatrician Yukon Kuskokwim (Yup'ik Eskimo) Delta Regional Hospital, Bethel, AK

# Other Professional Positions

2004 to	Private Practice (Solo) Pediatrics (emphasizing Behavioral Peds) Malone, NY
1998 to 00	Private Practice (Solo) Pediatrics (emphasizing Behavioral Peds) Malone, NY Stoff Padiatrics (Solo) Pediatrics Malone, NY (poorest county in state)
1997 to 00	Staff Pediatrician St. Regis Mohaudy (Januaria) II. 11. (2)
1997 to 98	Staff Pediatrician St. Regis Mohawk (Iroquois) Health Services, Hogansburg, NY Staff Pediatrician North Country Children's Clinic (clinic for needy children), Malone, NY

# Academic Appointments

2000 to 03	Assistant Clinical Professor of Pediatrics
	Columbia University, College of Physicians and Surgeons

## Health Effects of Wind Turbine Noise

Nina Pierpont, MD, PhD

(www.ninapierpont.com)

#### March 2, 2006

Industrial wind turbines produce significant amounts of audible and low-frequency noise. Dr. Oguz A. Soysal, Professor and Chairman of the Dept. of Physics and Engineering at Frostburg State University in Maryland, measured sound levels over half a mile away from the Meyersdale, PA, 20-turbine wind farm. Typical audible (A-weighted) dB (decibel) levels were in the 50-60 range, and audible plus low-frequency (C-weighted) dB were in the 65-70 range. 65-70 dB is the loudness of a washing machine, vacuum cleaner, or hair dryer. A difference of 10 dB between A and C weighting represents a significant amount of low-frequency sound by World Health Organization standards.3

The noise produced by wind turbines has a thumping, pulsing character, especially at night, when it is more audible. The noise is louder at night because of the contrast between the still, cool air at ground level and the steady stream of wind at the level of the turbine hubs.4 This nighttime noise travels a long distance. It has been documented to be disturbing to residents 1.2 miles away from wind turbines in regular rolling terrain,3 and 1.5 miles away in Appalachian valleys.6

At night, the WHO recommends, the level of continuous noise at the outside a dwelling should be 45 dB or less, and inside, 30 dB or less. These thresholds should be even lower if there is a significant low-frequency component to the sound, they add - as there is for wind turbines. Higher levels of noise disturb sleep and produce a host of effects on health, well-being, and productivity.7

The decibel is logarithmic. Increasing the dB level by 10 multiplies the sound pressure level by 10. Increasing the dB level by 20 multiplies the sound pressure level by 100 (and 30 dB multiplies by 1000, etc.). Thus the 65 dB measured day and night half a mile from the Meyersdale wind farm has a measured intensity 100 times greater than the loudest continuous outdoor nighttime noise (45 dB) recommended by the WHO.

Typical ordinances proposed or passed for NY State communities considering industrial wind turbines allow Aweighted noise levels of 50 dB and construction of turbines only 1000 ft, from dwellings. These ordinances meet neither WHO nor NYS DEC standards, especially compared to the very low ambient noise levels (with dB levels typically in the 20's) in rural NY.8

The health effects of excessive community noise are carefully documented in the WHO report with reference to scientific and medical literature. Effects relevant to wind turbines, in terms of dB levels and noise type, are paraphrased and summarized from this report:

For people to understand each other easily when talking, environmental noise levels should be 35 dB or less. For vulnerable groups (hearing impaired, elderly, children in the process of reading and language acquisition, and foreign language speakers) even lower background levels are needed. When noise interferes with speech comprehension, problems with concentration, fatigue, uncertainty and lack of

Soysal, OA. 2005. Acoustic Noise Generated by Wind Turbines. Presented to the Lycoming County, PA Zoning Board 12/14/05. osoysal@frostburg.edu

www.lhh.org/noise/decibel.htm

<sup>&</sup>lt;sup>3</sup> World Health Organization, 1999. Guidelines for Community Noise. Ed. by Berglund B et al. Available at www.who.int/docstore/peh/noise/guidelines2.html

<sup>4</sup> van den Berg, FGP, 2005. "The beat is getting stronger: The effect of atmospheric stability on low frequency modulated sound of wind turbines." Journal of Low Frequency Noise, Vibration, and Active Control, 24(1):1-24.

van den Berg, FGP, 2003. "Effects of the wind profile at night on wind turbine sound." Journal of Sound and Vibration 277:955-970.

<sup>&</sup>lt;sup>6</sup> Linda Cooper, Citizens for Responsible Windpower, "Activist Shares Wind Power Concerns," The Pendleton Times, March 3, 2005, p. 4.

<sup>7</sup> WHO, 1999. Guidelines for Community Noise.

<sup>8</sup> NYS DEC, 2001. Assessing and Mitigating Noise Impacts.

self-confidence, irritation, misunderstandings, decreased work capacity, problems in human relations, and a number of stress reactions arise.9

- Wind turbine noise, as described above and experienced by many turbine neighbors, is easily within the decibel levels to disturb sleep. Effects of noise-induced sleep disturbance include fatigue, depressed mood or well-being, decreased performance, and increased use of sedatives or sleeping pills. Measured physiologic effects of noise during sleep are increased blood pressure and heart rate, changes in breathing pattern, and cardiac arrhythmias. 10 Certain types of nighttime noise are especially bothersome, the authors note, including those which combine noise with vibration, those with lowfrequency components, and sources in environments with low background noise. 11 All three of these special considerations apply to industrial wind turbines in rural NY State. Children, the elderly, and people with preexisting illnesses, especially depression, are especially vulnerable to sleep disturbance.
- Noise has an adverse effect on performance over and above its effects on speech comprehension. The most strongly affected cognitive areas are reading, attention, problem solving, and memory. Children in school are adversely affected by noise, and it is the uncontrollability of noise, rather than its intensity, which is most critical. The effort to tune out the noise comes at the price of increased levels of stress hormones and elevation of resting blood pressure. The adverse effects are larger in children with lower school achievement. 12
- What is commonly referred to as noise "annoyance" is in fact a range of negative emotions, documented in people exposed to community noise, including anger, disappointment, dissatisfaction, withdrawal, helplessness, depression, anxiety, distraction, agitation, and exhaustion. 13 Numerous reports from neighbors of new industrial wind turbine installations document these symptoms. The percentage of highly annoyed people in a population starts to increase at 42 dB, and the percentage of moderately annoyed at 37 dB.

Low-frequency sound is also sensed as pressure in the ears. It modulates the loudness of regular audible frequencies, and is sensed as a feeling or vibration in the chest and throat.15 Neighbors of industrial wind turbines describe the distressing sensation of having to breathe in sync with the rhythmic thumps of the turbine blades, especially at night when trying to sleep.

The participants in noise studies are selected from the general population and are usually adults. Vulnerable groups of people are underrepresented. Vulnerable groups include people with decreased personal abilities (old, ill, or depressed people), people with particular diseases or medical problems, people (children) dealing with complex cognitive tasks such as reading acquisition, people who are blind or hearing impaired, fetuses, babies and young children, and the elderly. These people may be less able to cope with the impacts of noise exposure and at greater risk for harmful effects than is documented in studies. Attention needs to be paid to them when developing regulations and setback requirements for industrial wind turbines and other sources of annoying and debilitating noise.

Wind turbines also create moving visual disturbances, especially early and late in the day when the long shadows of moving blades sweep rhythmically over the landscape. That portion of the population which is susceptible to vertigo, unsteadiness, or motion sickness (including many children and a large proportion of the elderly) will be vulnerable to unsteadiness and nausea when subjected to this visual disturbance. People with seizure disorders are susceptible to triggering of seizures by the strobe effect of seeing the sun through the moving blades.

To protect the public health, it is critical that industrial wind turbines not be placed within a minimum of 1.5 miles of human dwellings (homes, hospitals, residential schools, nursing homes, prisons, etc.) or schools. In mountainous terrain the setback should be greater, especially in topography with long parallel ridges and valleys as in the Appalachians.

11 Ibid. p. 46

14 lbid. p. 51

<sup>&</sup>lt;sup>9</sup> WHO, 1999. Guidelines for Community Noise, pp. 42-44.

<sup>10</sup> Ibid, p. 44.

<sup>12</sup> Ibid. pp. 49-50

<sup>13 (</sup>bid. p. 50

Moller, H. and CS Pedersen. 2004. Hearing at low and infrasonic frequencies. Noise & Health 6 (23):37-57.

# Objection to Kenyon Wind LLC Proposal

# 15 February 2007 Presentation to MN PUC

Thank you to The Commission for the opportunity to present our concerns today regarding Kenyon Wind LLC's proposal. I want to clearly state that I and rural residents in and around the project boundary object to Applicant's proposal as it exists today. The documentation I submitted earlier, details multiple concerns about this proposed project which remain valid, but today I want to focus attention to the critical issues of Safety and Health.

# Safety

Public safety is being compromised with this proposal.

Two of the first three Suzlon S88 wind turbines installed in North America (Lake Wilson, MN) experienced catastrophic failure due to a software problem in its control system. Mr. Myron Weelborg, owner, sent me photos of the damage caused when these units went into a "runaway" condition in late 2006. I am submitting these photos to you today for your consideration. The twenty-five ton rotor, with a tip speed of ~200 mph, fragmented--causing structural damage to the tower and wind turbine so severe that both units must be taken down and replaced. Mr. Weelborg was informed that other installations of this turbine around the U.S. have since been taken off-line. Based on my professional experience as a degreed Mechanical Engineer and Quality Manager, the root-cause of a catastrophic failure like this is typically due to a lack of a robust design review process and/or insufficient qualification or analysis. Potential critical failure modes like this must be identified during the design phase, to eliminate them or mitigate their effects. This is typically done with analytical tools like FMEA's (Failure Modes & Effects Analysis).

A different size of Suzlon wind turbine was involved in an electrical fire in Chandler, MN in 2005 that resulted in one of three installers falling to his death from a height of 210 feet. Fires like this would be difficult to address with existing firefighting equipment due to the immense height of these towers--and under foreseeable conditions could threaten acres of crops and nearby residences.

Damage from projectiles is a threat to residents and passing motorists. Ice storms in this part of MN can be expected from late-fall to early spring. Rime icing would build up on the rotor blades causing imbalance. In addition, ice shedding could occur— with various factors affecting distance, trajectory and mass. A 1998 Finnish study showed that a 250m (820 ft) setback for a 350 KW turbine was sufficient to provide safety from moderate icing, defined as from 1-5 events per year. A taller tower and larger diameter rotor would likely increase this distance to > 1000 feet.

Turbine parts have been ejected up to 1500 feet from towers, a significant risk noted in Wind Energy Theory, Design & Application—according to a 2002 University of Massachusetts textbook.

Applicant's proposal does not address these potential projectiles or other hazardous conditions that might reasonably be expected to occur during the life of the project. This omission raises a concern as to the scope of planning for the project, or if these risks were recognized and not included in the proposal one might logically conclude that said proposal was incomplete per MN statute.

# Health

Health of rural residents will be adversely affected by Applicant's siting proposal. The threats can be categorized as visual disturbances and acoustic noise.

Visual disturbances include shadowing and flicker found in the early morning or late afternoon, resulting from blade rotation interacting with low sun elevation. It is particularly pronounced in the case of a very tall moving structure like the proposed industrial wind turbine with a rotor that sweeps a 289 foot diameter and reaches 408 feet above the foundation to the peak of the blade.

Acoustic noise is one of the most objectionable aspects of wind turbines. Data taken from Applicant's proposal shows incomplete noise data above 7.7 m/sec wind velocity, but with typical extrapolation of data, noise levels >57 dbA would be logically expected—as measured at 407 feet from the turbine at a height of ~33 ft above the ground, based on the data contained in Figure 7.2 of their proposal. Based on analysis, therefore, a single wind turbine should be kept at least 1.25 miles setback from a residence to avoid detection by an individual accustomed to the existing rural environment. This is based on a background ambient reading of 33 dbA taken by an acoustic expert on February 10, 2007 at my residence with a wind velocity of 5-10 mph. While MN PCA requires <50 dbA from 10 p.m. to 7 a.m., 60 dbA at other times, the persistent low frequency nature of the noise will be annoying at levels even below state limits. The World Health Organization recommends a further 5 dbA reduction to 45 dbA as the nighttime noise limit, for that reason..

Dr. Nina Pierpont, MD, PhD has published several reports regarding a phenomenon called, "Wind Turbine Syndrome (WTS)". The symptoms start when local turbines go into operation and resolve when the turbines are not rotating or when the individual is out of the affected area. WTS symptoms include chronic sleep disturbance, headaches, dizziness, nausea, exhaustion, irritability, inability to concentrate or learn, tinnitus (ringing of the ears), anxiety, anger, and depression. Not everyone is affected in the same manner, and studies are underway to try to understand what proportion of the population is affected. Dr.Pierpont testified before the New York State Legislature Energy Committee on March 7, 2006 and noted these risk factors: Sensitivity to low frequency vibration, age-related inner ear, and pre-existing migraine disorder. The latter is a complex neurological

condition affecting visual, hearing, motor control, and balance systems. Many people with migraine disorder have increased sensitivity to noise and motion—get carsick, seasick, and can't go on carnival rides. My wife, Lisa, was diagnosed with this condition at the Mayo clinic over three years ago—noting the predisposition with her family history. Migraine occurs in 12% of Americans, according to Dr.Pierpont, and she affirms "It is a common, familial, inherited condition".

# Conclusion & Recommendations

Applicant's proposal to site the nine 2.1 MW Suzlon turbines near rural residences is ill-advised, inappropriate, and inconsiderate of the Health and Safety of Kenyon's rural citizens. Reflecting upon these risks and other concerns related in my earlier submittal, the suitability of Applicant's proposal is further diminished by the Level 3 rating of this proposed wind site.

Some rural residents expressed support for the petition to deny the draft sit e permit but refused to sign, admitting they were intimidated by landowners who had already decided to host towers on their property. Of the families situated around the project boundary, about 70% agreed to sign a petition as a measure of "noconfidence" from residents or landowners near the project boundary. I hereby submit that petition signed by 46 rural citizens, constituting 46 adults and 23 children. This petition reads,

"We, the rural residents or landowners, who are located approximately inside or within a mile of the proposed project perimeter are opposed to this project layout for the reasons described in the attached summary."

Based on their petition, and the technical objections cited, I respectfully ask The Commission to reject the request for draft site application, as submitted. While none of us are against wind energy, per se, we believe this proposal is inappropriate as submitted. One might benchmark Mr.Garwin McNeilus' wind farm in rural Dodge Center, MN to see a world-class, people-sensitive, safe operation.

If Applicant's proposal is allowed to proceed, we ask The Commission to mandate:

- 1) Tower setbacks from residences to 1.25 miles,
- 2) Applicant to submit evidence of FMEA or other suitable design reviews to assure safe operation of the Suzlon S88 wind turbine under all conditions,
- 3) Applicant be required to resubmit proposal with all details as per MN statute and
- 4) Applicant to publish document with disclosure of all site conditions and risks

In closing, the rural Kenyon residents and I thank you for your consideration of these important factors and recommendations, which explain our objection to Applicant's proposal.

Sincerely, Michael W. Chase



#### DECOMMISSIONING SECURITY AGREEMENT

This DECOMMISSIONING SECURITY AGREEMENT (this "Agreement") dated as of March 1, 2005, is made by and between Elk River Windfarm LLC, a Kansas limited liability company ("Elk River") and Butler County, Kansas (the "County"). Elk River and the County may be referred to herein as a "Party", and collectively as the "Parties".

#### RECITALS

WHEREAS, on January 28, 2003, the Board of County Commissioners of the County (the "Board") approved Resolution 03-79, pursuant to which the Board authorized the issuance of conditional use permits (collectively, the "CUP") previously authorized pursuant to County resolutions numbered 03-13, 03-14, 03-15 and 03-16, as amended by resolution number 03-47:

WHEREAS, the CUP authorizes the construction of a wind turbine generation facility on certain specified lands located in the County (the "Site"), subject to the terms and conditions of the CUP;

WHEREAS, Elk River has entered into long-term wind energy leases (the "Leases") with the owners of the real property included within the Site,

WHEREAS, Elk River intends to develop and construct a 150 MW wind turbine generation facility (the "Project") on the Site;

WHEREAS, one of the conditions set forth in the CUP is that the Board approve and accept from Elk River security for the deconstruction of the Project after the end of its useful life (the "Security Condition"); and

WHEREAS, to satisfy the Security Condition and to ensure the availability of at least \$3,000,000 of decommissioning security at twenty (20) years following the commencement of construction of the Project, the Parties desire to enter into this Agreement.

NOW, THEREFORE, in consideration of the mutual promises, representations, warranties and covenants contained in this Agreement, the adequacy and sufficiency of which are hereby acknowledged, the Parties agree as follows:

#### ARTICLE 1. DECOMMISSIONING

1.1 Obligation of Elk River to Decommission the Project. Elk River shall decommission the Project in accordance with all applicable laws and regulations (the "Decommissioning"). Decommissioning with respect to the portion of the Project relating to each Lease shall include, among other activities, removal of the turbines, removal of the foundations therefor to a depth of four feet below grade and removal of interconnection transmission poles and lines; and shall commence within eight (8) months following the earliest to occur of (a) the termination of such Lease, (b) the expiration of the Lease term and (c) after the commencement of operations of one or more wind turbines on the leased property, Elk

DC01:399360.16

River's failure to operate any wind generation facilities on the leased property for a continuous period of at least twelve months for reasons other than Force Majeure. "Force Majeure" means an event beyond the control of the party affected and which, by exercise of due diligence and foresight, could not reasonably have been avoided.

- 1.2 Obligation to Post Security Upon the Commencement of Construction. Prior to the Commencement of Construction, Elk River shall (a) deliver to the County a Qualified Letter of Credit in an amount equal to not less than \$2,867,500 and (b) deliver to a Qualified Escrow Agent cash in an amount equal to \$132,500 (the "Initial Escrow Payment"). As used in this Agreement:
- 1.2.1 "Commencement of Construction" means the pouring of the first foundation for a wind turbine on the Site.
- 1.2.2 "Qualified Letter of Credit" means a letter of credit (a) with a term of at least one year issued by a creditworthy, nationally recognized financial institution reasonably acceptable to the County, (b) under which the County is authorized to make one or more drawings upon certification to the issuing financial institution of the occurrence of an Event of Default under this Agreement, (c) with respect to which the issuing financial institution has advised the County that it will deliver a Non-Renewal Notice at least thirty (30) days prior to expiration in the event that the letter of credit will not be renewed for any reason and (d) which letter of credit and associated documentation shall be substantially in the form included as Exhibit A
- 1.2.3 "Qualified Escrow Agent" means an escrow agent mutually and reasonably acceptable to the Parties which has entered into an escrow agreement with Elk River pursuant to which Elk River has authorized and directed the Escrow Agent to deliver escrowed funds to the County upon certification to the issuing financial institution of the occurrence of an Event of Default under this Agreement.
- 1.2.4 "Event of Default" shall mean either (a) an issuing financial institution's delivery of a Non-Renewal Notice to the County with respect to a Qualified Letter of Credit maintained hereunder, (b) any default in Elk River's obligations under this Agreement to deliver a required Escrow Payment (as defined below), which remains uncured for a period of thirty (30) days after notice from the County thereof or (c) Elk River's failure to perform its Decommissioning obligations under this Agreement.
- 1.2.5 "Non-Renewal Notice" means a notice from the financial institution issuing a Qualified Letter of Credit stating that the Qualified Letter of Credit will not automatically be renewed at the end of its stated term.
- 1.2.6 "Initial Posting Date" means the date upon which Elk River has delivered the Qualified Letter of Credit and Initial Escrow Payment pursuant to this Section 1.2

#### 1.3 Maintenance of Security During Construction and Commercial Operation.

#### 1.3.1 Escrow Payments.

- (a) On or before each of the first fifteen (15) anniversaries of the Initial Posting Date, Elk River shall deliver to the Qualified Escrow Agent, to be held in escrow, a payment of \$132,500 (each, a "Subsequent Escrow Payment").
- (b) On or before the twentieth (20<sup>th</sup>) anniversary of the Initial Posting Date, Elk River shall, if the amount of Escrowed Funds (as defined below) as of the close of business on the fifth preceding business day was less than \$3,000,000, deliver to the Qualified Escrow Agent, to be held in escrow, a payment in an amount equal to the emount of such shortfall (the "Twenty-Year True-Up Escrow Payment").
- (c) On or before the thirtieth (30%) anniversary of the Initial Posting Date, if (i) Elk River has not delivered prior to such date, pursuant to Section 1.4, documentation reasonably acceptable to the County evidencing Elk River's fulfillment of its Decommissioning obligations and (ii) the amount of Escrowed Funds (as defined below) as of the close of business on the fifth preceding business day was less than \$4,000,000, Elk River shall deliver to the Qualified Escrow Agent, to be held in escrow, a payment in an amount equal to the amount of such shortfall (the "Thirty-Year True-Up Escrow Payment" and, together with the Initial Escrow Payment, the Subsequent Escrow Payments and the Twenty-Year Escrow Payment, the "Escrow Payments").
- (d) All Escrow Payments, together with any interest or investment income with respect thereto (collectively, "Escrowed Funds"), shall be invested in short-term U.S. government obligations or other investments reasonably acceptable to the Parties and the Qualified Escrow Agent, and shall be subject to and available to the County upon the terms set forth in Section 1.2.3.

#### 1.3.2 Qualified Letter of Credit.

- (a) Elk River shall continuously renew, extend or replace the Qualified Letter of Credit as provided in Section 1.3.2(b) through the twentieth (20<sup>th</sup>) anniversary of the Initial Posting Date. The amount of the Qualified Letter of Credit as of each anniversary of the Initial Posting Date shall be not less than (i) \$3,000,000 mims (ii) the amount of Escrowed Funds as of such date (after giving effect to any Subsequent Escrow Payments made on or prior to such date). Following the twentieth (20<sup>th</sup>) anniversary of the Initial Posting Date, Elk River shall be entitled to cause the Qualified Letter of Credit to be terminated and shall have no further obligation to maintain a Qualified Letter of Credit hereunder.
- (b) Notwithstanding any other provision of this Section 1.3.2 to the contrary, Blk River shall be entitled, at any time during the term of this Agreement, to deliver an Escrow Payment to the Qualified Escrow Agent in the amount equal to the amount of the Qualified Letter of Credit then required to be maintained under Section 1.3.2(a). Upon delivery of such payment, Blk River shall be entitled to cause the Qualified Letter of Credit to be terminated and shall have no further obligation to maintain a Qualified Letter of Credit hereunder.

- (c) Promptly following the earlier to occur of (i) the twentieth (20<sup>th</sup>) anniversary of the Initial Posting Date and (ii) Elk River's delivery of an Escrow Payment in accordance with Section 1.3.2(b), the County shall return the Qualified Letter of Credit to or at the direction of Elk River.
- 1.4 Release of Escrowed Punds. Promptly following Elk River's delivery of documentation reasonably acceptable to the County evidencing Elk River's fulfillment of its Decommissioning obligations, the County shall direct the Qualified Escrow Agent to immediately release and deliver to Elk River all Escrowed Funds. Upon Elk River's receipt of such funds, this Agreement shall terminate and be of no further effect.
- 1.5 Continuing Obligation; Forfeiture of CUP. Elk River acknowledges that its obligations under this Agreement are continuing in nature. The occurrence of an Event of Default under this Agreement shall result in forfeiture and termination of the CUP.
- 1.6 <u>Indicative Example of Decommissioning Security.</u> Attachment A contains an example, for illustrative purposes only, of the amounts of Qualified Letters of Credit and Escrowed Funds that would be delivered and maintained in accordance with this Article 1 under certain assumed facts set forth therein.

#### ARTICLE 2. NOTICES

Any communications between the Parties hereto or regular notices provided herein to be given shall be given to the following addresses:

To Elk River:

Elk River Windfarm, LLC c/o PPM Energy, Inc.

1125 NW Couch, Suite 700

Portland, OR 97209

Telephone: (503) 796-7000 Facsimile: (503) 813-6907

Attention: Contract Administration

To the County:

Burler County, Kansas 205 W. Contral

El Dorado, KS 67042

Telephone: (3 Facsimile: (3

(316) 322-4300 (316) 322-4387

Attention:

County Administrator

With a copy to:

Board of County Commissioners

Butler County, Kansas 205 W. Central El Dorado, KS 67042

Telephone: (316) 322-4300 Facsimile: (316) 322-4387

Attention:

Chairman, County Commission

Any notice which is personally served shall be effective upon the date of service; any notice given by U.S. Mail shall be deemed effectively given, if deposited in the United States Mail, registered or certified with return receipt requested, postage prepaid and addressed as provided above, on the date of receipt, refusal or non-delivery indicated on the return receipt. In addition, either Party may send notices by facsimile or by a nationally recognized overnight courier service which provides written proof of delivery (such as U.P.S. or Federal Express). Any notice sent by facsimile shall be effective upon confirmation of receipt in legible form, and any notice sent by a nationally recognized overnight courier shall be effective on the date of delivery to the Party at its address specified above as set forth in the courier's delivery receipt. Either Party may, by notice to the other from time to time in the manner herein provided, specify a different address for notice purposes.

#### ARTICLE 3. MISCELLANEOUS

#### Successors and Assigns; Financing.

- (a) This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors and assigns. If Elk River sells or transfers all or substantially all of the assets comprising the Project to another person or entity, it shall cause such person or entity, as a condition to such sale or transfer, to agree to fulfill Elk River's obligations under this Agreement. The consent of the County shall not be required to effect such an assignment, but Elk River shall remain liable for its obligations under this Agreement subsequent to such assignment if such consent (which shall not be unreasonably withheld) is not obtained. Any assignment in contravention of this provision shall be void.
- (b) Without limiting the generality of the foregoing, the Parties specifically agree that Elk River may pledge, collaterally assign, or encumber its rights under this Agreement to any lender or other party providing financing to the Project. In such event, the County agrees to make commercially reasonable efforts to accommodate requests made by Elk River or such lender or financing party including, if requested by Elk River or such lender or financing party (i) executing a consent to assignment in form and substance reasonably acceptable to the County and consistent with then-current financing practices and/or (ii) executing and delivering such estoppel statements as may reasonably be requested.
- 3.2 Entire Agreement; Amendments; Attachments. This Agreement, and all exhibits and schedules hereto, represents the entire understanding and agreement between the Perties with respect to the subject matter hereof and supersedes all prior oral and written and all contemporaneous oral negotiations, commitments and understandings between the Parties. The

Parties may amend or modify this Agreement, in such manner as may be agreed upon, by a written instrument executed by the Parties. Any exhibits and schedules attached heroto are hereby incorporated into and considered part of this Agreement.

- 3.3 Severability. Any provision of this Agreement which is invalid, illegal or unenforceable shall be ineffective to the extent of such invalidity, illegality or unenforceability, without affecting in any way the remaining provisions hereof or rendering that or any other provision of this Agreement invalid, illegal or unenforceable. Upon such determination that any term or other provision is invalid, illegal or incapable of being enforced, the Parties shall negotiate in good faith to modify this Agreement so as to effect the original intent of the Parties as closely as possible in an acceptable manner to the end that the transactions contemplated hereby are fulfilled to the fullest extent possible.
- 3.4 Waiver of Jury Trial. Each Party hereto waives, to the fullest extent permitted by applicable law, any right it may have to a trial by jury in respect of any action arising out of or relating to this Agreement.
- 3.5 <u>Governing Law.</u> This Agreement shall be governed by and construed in accordance with the laws of the State of Kansas, excluding any laws thereof which would direct application of law of another jurisdiction.
- 3.6 Section Headings. The Section headings are for the convenience of the Parties and in no way alter, modify, amend, limit or restrict the contractual obligations of the Parties.
- 3.7 <u>Counterparts: Facsimile Signatures.</u> This Agreement may be executed in counterparts, each of which shall have the effect of and be considered as an original of this Agreement. Transmission of a facsimile or PDF version of any signed original document, and retransmission of any such transmission, will be the same as delivery of any original document. At the request of the other Party, each Party will confirm transmitted facsimile signatures by signing an original document.
- 3.8 No Third Party Beneficiaries. This Agreement is entered into for the sole benefit of the Parties, and except as specifically provided herein, no other Person shall be a direct or indirect beneficiary of, or shall have any direct or indirect cause of action or claim in connection with, this Agreement.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, this Agreement has been duly executed by the parties hereto as of and on the date first above written.

ELK RIVER WINDFARM, LLC

BOARD OF COUNTY COMMISSIONERS, BUTLER COUNTY, KANSAS

Name: Peter C. van Alderwerelt Vitte: Vice President

By Mame: Title:

Approval as to Form County Legal Dpt. 1676 - 3-4-05

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# DEPOSIT ESCROW AGREEMENT

Pursuant to this Escrow Agreement (the "Agreement"), dated April 10, 2005, the Depositor identified below (the "Depositor") hereby establishes Account No 788972000 (the "Account") with U.S. Bank National Association (the "Agent"), to be maintained and administered for the benefit of Butler County, Kansas (the "County") as described in Schedule II attached hereto in accordance with the following terms and conditions:

The funds and/or documents described on Schedule I attached hereto (the "Assets") shall be deposited in Account upon delivery thereof to Agent, in the manner specified in Schedule II attached hereto. Agent is hereby authorized and directed by Depositor, as their Agent, to hold, dead with and dispose of Assets as provided in the instructions set forth in Schedule II attached hereto and incorporated herein; subject, however, to the terms and conditions set forth below, which in all events, shall govern and control over any contrary or inconsistent provisions contained in Schedules or Exhibits attached hereto.

- 1. Agent's Duties. Agent's duties and responsibilities shall be limited to those expressly set forth in this Agreement, and Agent shall not be subject to, or obligated to recognize, any other agreement between any or all of the parties or any other persons even though reference thereto may be made herein; provided, however, this Agreement may be amended at any time or times by an instrument in writing signed by all the parties hereto. Agent shall not be subject to or obligated to recognize any notice, direction or instruction of any or all of the parties hereto or of any other person, except as expressly provided for herein.
- 2. Agent's Actions and Reliance. Agent shall not be personally liable for any act taken or omitted by it thereunder if taken or omitted by it in good faith and in the exercise of its own best judgment. Agent shall also be fully protected in relying upon any written notice, instruction, direction, certificate or document which in good faith it believes to be genuine, including written instruction from the County in the form of the attached Exhibit A to Schedule II.
- 3. Agent Responsibility. Agent shall not be responsible or liable for the sufficiency or accuracy of the form, execution, validity or genuineness of documents, instruments or securities now or hereafter deposited in Account, or of any endorsement thereon, or for any lack of endorsement thereon, or for any description therein. Registered ownership of or other legal title to Assets deposited in Account shall be maintained in the name of Agent, or its nominee, only if expressly provided in Schedule II. Agent may maintain qualifying Assets in a Federal Reserve Bank or in any registered clearing agency (including, without limitation, the Depository Trust Company) as Agent may select, and may register such deposited Assets in the name of Agent or its agent or nominee on the records of such Federal Reserve Bank or such registered clearing agency or a nominee of either. Agent shall not be responsible or liable in any respect on account of the identity, authority or rights of the persons executing or delivering or purporting to execute or deliver arry such document, security or endorsement or this Agreement.
- 4. <u>Collections</u>. Unless otherwise specifically indicated in Schedule II, Agent shall proceed as soon as practicable to receive any checks, interest due, matured principal or other collection items with respect to Assets at any time deposited in Account. All such collections shall be subject to

the usual receipt procedures regarding items received by Agent for deposit or collection. Agent shall not be responsible for any collections with respect to Account Assets if Agent is not registered as record owner thereof or otherwise is not entitled to request or receive payment thereof as a matter of legal or contractual right. All payment receipts shall be deposited to Account, except as otherwise provided in Schedule II. Agent shall not be required to have a duty to notify anyone of any payment or maturity under the terms of any instrument, security or obligation deposited in Account, nor to take any legal action to enforce payment of any check, instrument or other security deposited in Account. Account is a safekeeping escrow account, and no interest shall be paid by Agent on any money deposited or held therein.

- All monies held in Account shall be invested at the written direction of Depositor by Agent in noncallable, direct, general obligations of the United States of America. (including the obligations issued or held in book-entry form on the books of the Department of the Treasury of the United States of America) or any obligations unconditionally guaranteed as to the full and timely payment of principal and interest by the full faith and credit of the United States of America. In the absence of written direction, Agent is hereby directed to invest all monies held irn Account in the triple "A" rated First American U.S. Treasury Only Money Market Fund (Class D). The Depositor and County hereby confirm receipt of the First American Funds prospectus. Depositor and County further acknowledge that the fund investment advisor, custodian, distributor and other service providers as described in the prospectus are affiliates of U.S. Bank National Association, and investment in the fund includes approval of the fund's fees and expenses as detailed in the prospectus, including advisory and custodial fees and shareholder service expenses (which may be so called 12b-1 shareholder service fees), which fees and expenses are paid to U.S. Bank National Association, or subsidiaries of U.S. Bancorp. The shares of the funds are not deposits or obligations of, or guaranteed by, any bank including U.S. Bank National Association or any of its affiliates, nor are they insured by the Federal Deposit Insurance Corporation, the Federal Reserve Board or any other agency. The investment in the fund involves investment risk, including possible loss of principal. All accrued interest shall become part of the Escrow Fund. All entities entitled to receive interest from the escrow account will provide Escrow Holder with a W-9 or W-8 IRS tax form prior to the disbursement of interest. A statement of citizenship will be provided if requested by Agent. The Agent shall not be liable for losses, penalties or charges incurred upon any sale or purchase of any such investment.
- 5.1 Assets held by Agent under this Agreement are irrevocably held in escrow for the purposes herein specified, and such moneys and any other income or interest earned shall be maintained by Agent and shall not be subject to levy or attachment or lien, or for the benefit of any creditor of Depositor unless otherwise directed under Section 10 hereof.
- 5.2 The Depositor and the County acknowledge that regulations of the Comptroller of the Currency grant the Depositor and the County the right to receive brokerage confirmations of the security transactions as they occur. Depositor and the County specifically waive compliance with 12CFR12 and herein notify Agent that no brokerage confirmations need be sent relating to investment transactions as they occur, so long as monthly statements of the Account are sent to the Depositor and the County.
- 6. <u>Notices and/or Directions to Agent</u>. Notices and directions to Agent from Depositor and the County as expressly set forth herein including attached exhibits, if any, shall be in writing and signed by an authorized representative as identified on the signature to this Agreement, and shall not be deemed to be given until actually received by Agent's employee or officer who administers:

Account. Agent shall not be responsible or liable for the authenticity or accuracy of notices or directions properly given hereunder if the written form and execution thereof on its face purports to satisfy the requirements applicable thereto as set forth herein, as determined by Agent in good faith without additional confirmation or investigation.

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- 7. <u>Books and Records</u>. Agent shall maintain books and records regarding its administration of Account, and the deposit, receipt and disbursement or transfer of Assets, and shall retain copies of all written notices and directions sent or received by it in the performance of its duties hereunder, and shall afford Depositor and the County reasonable access, during regular business hours, to review and make photocopies (at requester's cost) of the same.
- 8. <u>Disputes Among Depositor and the County or Third Parties</u>. In the event Agent is notified of any dispute, disagreement or legal action between Depositor and the County, or any third parties, relating to or arising in connection with Account, Assets or the performance of Agent's duties under this Agreement, Agent shall be authorized and entitled, subject to Section 10 hereof, to suspend further performance hereunder and to retain and hold Assets then in Account. Agent may take no further action with respect thereto until the matter has been fully resolved, as evidenced by written notification signed by Depositor and the County and any other parties to such dispute, disagreement or legal action.
- 9. <u>Litigation Among Depositor, the County, Agent and/or Third Parties</u>. With regard to any litigation among the parties hereto, or if Agent reasonably believes, in its sole discretion that it may become involved in litigation, Agent is authorized to deposit Assets in Account with the Clerk of District Court ("Court") of the County of Butler, State of Kansas, and interplead the Depositor, the County and third parties.
- 9.1 Upon so depositing such Assets and filing its complaint in interpleader, Agent shall be completely discharged and released from all further liability or responsibility under the terms hereof. If Agent deposits said Assets as provided in this paragraph, the parties hereto, for themselves, their heirs, successors and assigns, do hereby submit themselves to the jurisdiction of said Court and do hereby appoint the Clerk of said Court as their agent of service of all proceeds in connection with the proceeding mentioned in this paragraph.
- 10. Court Orders or Process. Agent is authorized, in its sole discretion, to comply with orders issued or process entered by any court with respect to Account, Assets or this Agreement, without determination by Agent of such court's jurisdiction in the matter. If any Assets are at any time attached, garnished, or levied upon under any court order, or in case the payment, assignment, transfer, conveyance or delivery of any such property shall be stayed or enjoined by any court order, or in case any order, judgment or decree shall be made or entered by any court affecting such property or any part thereof, then in any such event Agent is authorized, in its sole discretion, to rely upon and comply with any such order, writ, judgment or decree which it is advised by legal counsel of its own choosing is binding upon it, and if Agent complies with any such order, writ, judgment or decree, it shall not be liable to Depositor, or to any other person, firm or corporation by reason of such compliance even though such order, writ, judgment or decree may be subsequently reversed, modified, annulled, set aside or vacated.
- Legal Counsel. If Agent believes it to be reasonably necessary to consult with counsel concerning any of its duties in connection with Account or this Agreement, or in case Agent

becomes involved in litigation on account of being Agent hereunder or on account of having received property subject hereto, then in either case, its reasonable costs, expenses, and attorney's fees shall be paid by Depositor.

- 12. Depositor's Indemnity Obligations to Agent. Depositor shall indemnify and defend Agent against, and hold Agent harmless of and from, any and all losses, liability, claims, damages, costs and expenses (including, but not limited to, reasonable attorneys' fees and court costs, whether incurred at the trial, appellate or administrative levels) that Agent may suffer or incur, or to which Agent may be subjected by reason of, arising directly out of, or directly in connection with (a) the custody or preservation of, or the sale of, collection from, or other realization upon, Assets, or (b) the exercise or enforcement of any of the rights of Depositor or the County hereunder in accordance with applicable law. Upon demand by Agent, Depositor shall defend any action or proceeding brought against Agent in connection with any of the foregoing, or Agent may elect to conduct its own defense at the expense of Depositor. In any event, Depositor shall reimburse Agent in full for all costs reasonably incurred investigating, preparing or defending against any action or proceeding commenced or threatened, in connection with any of the foregoing matters, or incurred in settlement of any such action or proceeding (whether commenced or threatened). Notwithstanding any other provision in this Section, Depositor's indemnity obligations hereunder shall be limited to the extent such obligations arise from the gross negligence or willful misconduct of Agent or failure to perform its contractual obligations set forth in this Agreement. In no event shall the provision of this Section relieve or diminish Depositor's indemnity obligations to Agent.
- 13. Agent Fees. Agent shall be paid a fee for its services as set forth on Schedule III attached hereto and incorporated herein, which shall be subject to increase upon notice sent to Depositor, and reimbursed for its reasonable costs and expenses incurred on behalf of Depositor. However, in the event that the conditions for this Agreement are not fulfilled, or Agent renders any material service not contemplated in this Agreement, or there is any assignment of interest in the subject matter of this Agreement, or any material modification hereof, or if any material controversy arises hereunder, or Agent is made a party to or justifiably intervenes in any litigation pertaining to this Agreement, or the subject matter hereof, Agent shall be reasonably compensated for such extraordinary services and reimbursed for all reasonable costs and expenses, including interpleader filing fees, and reasonable attorney's fees, occasioned by any delay, controversy, litigation or event, and the same shall be recoverable from Depositor.
- 13.1 If Agent's fees or reasonable costs or expenses, provided for herein, are not promptly paid, Agent shall have the right to sell such portion of Assets held in Account as necessary and reimburse itself therefor from the proceeds of such sale or from the cash held in Account. Agent shall promptly notify the County if it utilizes the Assets for reimbursement of its fees, costs or expenses as provided in this Section 13.1.
- 14. Agent Resignation. It is understood that Agent reserves the right to resign at any time by giving written notice of its resignation, specifying the effective date thereof, to Depositor and the County. Within 30 days after receiving the notice of resignation, Depositor agrees to appoint a successor escrow agent to which Agent may transfer Assets then held in Account. If a successor escrow agent has not been appointed and has not accepted such appointment by the end of the 30-day period, Agent is authorized, in its sole discretion, to completely discharge and release itself from all further liability or responsibility in the manner provided in Section 9.1, or Agent may apply to a court of competent jurisdiction for the appointment of a successor escrow agent, and the costs, expenses and reasonable attorney's fees which Agent incurs in connection with such a

proceeding shall be paid by Depositor. Agent's fees will be prorated to cover only the time of Agent's service in comparison to time spent by a successor escrow agent and Agent agrees to return to Depositor any unearned fees.

- 15. Notice by Agent. Any notices which Agent is required or desires to give hereunder to Depositor and the County shall be in writing and may be given by mailing the same to the address indicated below opposite the signature of such Depositor or the County (or to such other address as said Depositor or the County may have thereafter substituted therefor by written notification to Agent), by United States First Class mail or by confirmed facsimile transmission to the specified facsimile number (or to such other facsimile number as may hereafter be substituted by written notification to Agent). For all purposes hereof any notice so mailed or sent by confirmed facsimile shall be as effectual as though served upon the person of Depositor to whom it was mailed at the time it is deposited in the United States mail by Agent or at the time at which written confirmation of transmission is received whether or not such undersigned thereafter actually receives such notice. Whenever under the terms hereof the time for Agent's giving a notice or performing an act falls upon a Saturday, Sunday, or holiday, such time shall be extended to the next business day.
- 16. <u>Escrow Termination</u>. This Agreement shall terminate as provided in Schedule II, at which time Assets then held in Account, less Agent's unpaid fees, costs and expenses, shall be distributed as provided therein.
- 17. Governing Law. This Agreement shall be construed, enforced, and administered in accordance with the laws of the State of Kansas.
- 18. <u>Counterparts</u>. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be one and the same instrument. The exchange of copies of this Agreement and of signature pages by facsimile transmission shall constitute effective execution and delivery of this Agreement as to the parties and may be used in lieu of the original Agreement for all purposes. Signatures of the parties transmitted by facsimile shall be deemed to be their original signatures for all purposes.

IN WITNESS WHEREOF, the undersigned have affixed their signatures and hereby adopt as part of this instrument Schedules I, II, III, IV and V which are incorporated by reference.

DEPOSITOR:	COUNTY:
ELK RIVER WINDFARM LLC	BOARD OF COUNTY COMMISSIONERS, BUTLER COUNTY, KANSAS
By: Swee N Williams  Title: Treasurer  By: Sawy School  Name: Tanya S. Sacks  Title: Assistant Treasurer	By: Name: Title:
1125 NW Couch, Suite 700 (Address)	(Address)
Portland, OR 97209 (City, State and Zip Code)	(City, State and Zip Code)
503-813-5660	77.1
(Telephone) 503-813-5675	(Telephone)
(Telecopy Number)	(Telecopy Number)
Tax I.D. <u>05-0557326</u>	
84	U.S. BANK NATIONAL ASSOCIATION, as Agent
	By: Its:

IN WITNESS WHEREOF, the undersigned have affixed their signatures and hereby adopt as part of this instrument. Schedules I, II, III, IV and V which are incorporated by reference.

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#### SCHEDULE I

#### DEPOSITS:

Deposits will include the following:

- 1. An initial payment in an amount equal to \$132,500, to be delivered by Depositor upon the "Commencement of Construction" of the Elk River wind project under that certain Decommissioning Security Agreement, dated March 1, 2005, by and between Depositor and the County. "Commencement of Construction" means the pouring of the first foundation for a wind turbine on the site of the Elk River wind project. The date of the delivery of the initial escrow payment is the "Initial Posting Date."
- A payment in an amount equal to \$132,500, to be delivered by Depositor on or before each of the first fifteen (15) anniversaries of the Initial Posting Date.
- 3. On or before the twentieth (20<sup>th</sup>) anniversary of the Initial Posting Date, Depositor will, if the amount of funds on deposit in the Account as of the close of business on the fifth preceding business day was less than \$3,000,000, deliver to the Agent a payment in an amount equal to the amount of such shortfall.
- 4. On or before the thirtieth (30th) anniversary of the Initial Posting Date, if (a) amounts on deposit in the Account shall not have previously been fully disbursed or the Agreement terminated and (b) the amount of funds on deposit in the Account as of the close of business on the fifth preceding business day was less than \$4,000,000, Depositor will deliver to the Agent a payment in an amount equal to the amount of such shortfall.

### SCHEDULE II

#### INSTRUCTIONS OF DEPOSITOR AND THE COUNTY

- The Account is maintained for the benefit of the County, pursuant to a Decommissioning Security Agreement, dated March 1, 2005, by and between Depositor and the County (the "Security Agreement").
- All amounts deposited in the Account by Depositor, as well as any investment or interest income thereon, shall be invested during the term of the Agreement as set forth in Section 5.
- Copies of all correspondence relating to the account, including copies of periodic statements
  of amounts on deposit thereon, shall be forwarded to the County concurrently with the delivery
  thereof to the Depositor.
- Funds to be deposited in the Account shall be delivered as follows:

(by check) U.S. Bank National Association Attn: Olaleye Fadahunsi Lockbox Services — CM9705 P.O. Box 70870 St. Paul, MN 55170-9705

(by wire) U.S. Bank National Association ABA: 091 000 022 Credit: A/C #180121167365 U.S. Bank Trust Ref: Escrow #788972000 Contact: Olaleye Fadahunsi (651) 495-3726

5. Any notices required hereunder shall be in writing and may be given by mailing the same to the address indicated below (or to such other address as a party may substitute by written notification to all other parties), by United States certified or registered mail, postage prepaid, or by confirmed facsimile transmission to the specified facsimile number (or to such other facsimile number as may hereafter be substituted therefore by written notification to all other parties). For all purposes hereof any notice so mailed or sent by confirmed facsimile) shall be as effectual as though served upon the person of Depositor to whom it was mailed at the time it is deposited in the United States mail by Agent or at the time at which written confirmation of transmission is received whether or not such undersigned thereafter actually receives such notice. Whenever under the terms hereof the time for giving a notice falls upon a Saturday, Sunday, or holiday, such time shall be extended to the next business day. The addresses for notices to the parties shall be as follows:

If to Agent:

U.S. Bank National Association

60 Livingston Avenue EP-MN-WS3T

St. Paul, MN 55107-2292 Attn: Olaleye Fadahunsi

Phone: (651) 495-3726; Fax: (651) 495-8087 If to Depositor:

PPM Energy, Inc.

1125 NW Couch, Suite700 Portland, OR 97209

Attn: Contract Administrator Phone: (503) 796-7000 Fax: (503) 796-6906

With a copy (statements only) to:

PacifiCorp Holdings, Inc. 825 N E Multnomah

Suite 1900

Portland, OR 97232 Attn: Tanya S. Sacks Phone: (503) 813-5660 Fax: (503) 813-5675

If to the County:

Butler County, Kansas

205 W. Central

El Dorado, KS 67042

Attn: County Administrator Telephone: (316) 322-4300 Facsimile: (316) 322-4387

- 6. Upon receipt of a written, notarized certification by two County Authorized Representatives in the form attached as Exhibit A hereto (the "County Certification"), the Agent shall promptly notify Depositor. Depositor shall have five business days to confirm that the County Authorized Representatives are authorized to act on behalf of the County or to deliver a certification of an Depositor Authorized Representative that the Depositor has determined that the purported representatives of the County are not County Authorized Representatives and directing the Agent not to act upon the County Certification. If Depositor does not object within such five business day period, Agent shall deliver the funds on deposit in the Account by wire transfer to an account designated in the County Certification. "County Authorized Representatives" shall initially mean the authorized representatives of the County specified in Schedule IV, as modified from time to time by notice from the County delivered concurrently to Depositor. "Depositor Authorized Representative" shall initially mean the authorized representatives of the Depositor solely for the purpose of delivering an objection pursuant to this paragraph 6 that specified in Schedule V, as modified from time to time by notice from the Depositor delivered concurrently to the County.
- 7. Promptly following receipt of a written, notarized certification by two County Authorized Representatives that Depositor has fulfilled its decommissioning obligations under the Security Agreement, the Agent shall contact Depositor and withdraw and deliver the amounts on deposit in the Account pursuant to directions executed by two Depositor Authorized Representatives

# EXHIBIT A

U.S. Bank National Association Attn.: Olaleye Fadahunsi	Phone: (651) 495-3726 Fax: (651) 495-8087
60 Livingston Avenue EP-MN-WS3T	
St. Paul, MN 55107-2292	
Dear Sir or Madam:	
maintained as specified in Schedule II among the Butler County, Kansas (th U.S. Bank National Association. Th under the terms of that certain Decombetween Depositor and the County.	for disbursement of all amounts on deposit in the escrow account of the Deposit Escrow Agreement dated, 2005 ne "County"), Elk River Windfarm LLC (the "Depositor") and ne undersigned certify that an "Event of Default" has occurred emissioning Security Agreement, dated March 1, 2005, by and the funds by check mailed to the following address [or by federal to instructions below]:
County Author	orized Representatives:
7	
Name: Title:	
Title.	
Name:	

Title:

Subscribed and sworn to be before me this \_\_\_\_\_ day of \_\_\_

Notary Public

My Commission Expires: \_\_\_\_\_

#### SCHEDULE III

## Schedule of Fees for Services as Escrow Agent

# For Elk River Windfarm LLC/ Butler County, Kansas Board of County Commissioners

#### Administrative Fees Billed Annually

#### 01010 Acceptance Fee

\$1,000.00

The acceptance fee includes the administrative review of documents, initial set-up of the account, and other reasonably required services up to and including the closing. This is a one-time fee, payable at closing.

U.S. Bank Corporate Trust Services reserves the right to refer any or all escrow documents for legal review before execution. Legal fees (billed on an hourly basis) and expenses for this service will be billed to, and paid by, the customer. If appropriate and upon request by the customer, U.S. Bank Corporate Trust Services will provide advance estimates of these legal fees.

#### 04460 Escrow Agent

\$1,500.00

Annual administration fee for performance of the routine duties of the escrow agent associated with the management of the account. Administration fees are payable in advance.

#### Direct Out of Pocket Expenses

At Cost

Reimbursement of expenses associated with the performance of our duties, including but not limited to publications, legal counsel after the initial close, travel expenses and filing fees.

#### Extraordinary Services

Extraordinary services are duties or responsibilities of an unusual nature, including termination, but not provided for in the governing documents or otherwise set forth in this schedule. A reasonable charge will be assessed based on the nature of the service and the responsibility involved. At our option, these charges will be billed at a flat fee or at our hourly rate then in effect.

Account approval is subject to review and qualification. Fees are subject to change at our discretion and upon written notice. Fees paid in advance will not be prorated. The fees set forth above and any subsequent modifications thereof are part of your agreement. Finalization of the transaction constitutes agreement to the above fee schedule, including agreement to any subsequent changes upon proper written notice. In the event your transaction is not finalized, any related out-of-pocket expenses will be billed to you directly. Absent your written instructions to sweep or otherwise invest, all sums in your account will remain uninvested and no accrued interest or other compensation will be credited to the account. Payment of fees constitutes acceptance of the terms and conditions set forth.

#### IMPORTANT INFORMATION ABOUT PROCEDURES FOR OPENING A NEW ACCOUNT:

To help the government fight the funding of terrorism and money laundering activities, Federal law requires all financial institutions to obtain, verify and record information that identifies each person who opens an account. For a non-individual person such as a business entity, a charity, a Trust or other legal entity we will ask for documentation to verify its formation and existence as a legal entity. We may also ask to see financial statements, licenses, identification and authorization documents from individuals claiming authority to represent the entity or other relevant documentation.

Dated: March 22, 2005

## SCHEDULE IV

# COUNTY AUTHORIZED REPRESENTATIVES

The following individual(s) are designated as "County Authorized Representatives," and are authorized to act on behalf of the Board of Commissioners of Butler County, Kansas under this Agreement:

1.	County Authorized Representative*: Commission Chairman Mike Wheeler (Print full name and title)
	Specimen Signature: Chairman Make Sheeler
2.	County Authorized Representative*: County Administrator Will Johnson (Print full name and title)
	Specimen Signature: Will W
* ]	To be witnessed and executed by legal counsel to the County:
Na	me: Norman Manley (Print full name)
	Specimen Signature: Man A Many
	Dated: 5/6/05
	#
	abscribed and sworn to be before me this 6 day of MOLL, 20 05.
St	bscribed and sworn to be before me this day of day of, 20
Q.	atom Public Sandra S. ZIEMAN Sandra S. ZIEMAN Notary Public - State of Kensas

My Commission Expires: 2-14-08

## SCHEDULE V

# DEPOSITOR AUTHORIZED REPRESENTATIVES

The following individual(s) are designated as "Depositor Authorized Representatives," and are authorized to act on behalf of the Depositor under this Agreement:

admortized to act our benant of the Depositor under uni-	s Agreement.
I. Depositor Authorized Representative*:  Peter C. van Alderwerelt, Vice Preside  Specimen Signature: Human Old	nt V
* To be witnessed and executed by an authorized offi	
Name: Bruce N. Williams (Print full Treasurer Specimen Signature: Succe N Will	name and title)
Dated: March 30, 2005	
Subscribed and sworn to be before me this 30 <sup>th</sup>	day of _March_, 20 05.
Notary Public  My Commission Expires July 2006	OFFICIAL SEAL  KRISTINE OLSEN  NOTARY PUBLIC - OREGON  COMMISSION NO. 359262  MY COMMISSION EXPIRES JULY 4, 2006
· Multhoman County	

## Canastota Wind Power LLC Property Value Assurance Plan

This forter agreement is intended to provide certain landowness in the imused site proximity of our wind energy faint in Feine: a "property value assurance" plan

For interact, this agreement is being voluntarity offered by Canastota Wind Power LLC ("CWP") to protect the immediate neighbors of the windfarm from the remote possibility that the value of their owner-necupied property will be diminished due to the presence of CWP's wind nubine generators on adjacent parcels.

Importantly, please bear in mind that CWP is under no legal or other obligation to make this property assurance available, and terrher that CWP will retain the full power to decide which neighboring landowners will receive the protection, which will be limited to owner-occupied homes.

The purpose of this agreement is to:

- a) establish market values for the properties in question in accordance with generally accepted market-based valuation methods;
- b) establish a time limitation upon which the property may be offered for sale to receive the benefit of this
  associated plan, and
- c) establish a method of compensating the property owner for the loss, if any, is marker value.

The plan consists of these elements

- Establishing the Content Value of your Home;
  - Two neutral real estate agents will be selected from a list of agents licensed in the State of New York and conducting business in the general project area (one of whom shall be selected by the property owner, and one by CWP).
  - Each agent shall perform a Comparative Market Analysis ("CMA") of the property in its current state—which will compare the property size and improvements to not less than three similar properties in the Marketon County area sold within the provious six months, and three similar properties that are listed for sale, using generally accepted CMA methods.
  - The property valuation determined from each CMA will then be averaged to determine the "baseline" property value for Assurance Plan purposes only. Both CMAs will be performed at CWP's expense. The property owner hereby agrees to permit access to the property as required to perform the CMA impection. Furthermore, the property owner benefit agrees to provide full disclosure of known defects of the property as may be required under New York State Law.
  - The agents preparing the CMAs will provide a written copy of their report to both the property
    owner and CWP, CWP reserves the right to reject CMA results only in the instance of a clear
    mittake by the agent.
  - The property owner will have the opportunity to reject the CMA results, but m so doing will forfeit the opportunity to take advantage of this plan.
- 2. Establishing the Future Value of your Home If Littled for Sale
  - If at any time during the farce year period after June 1, 2001, the property owner lists the property for sale with a qualified realter from the Board of Realture of Madison County (but not the same firm or realter that supplied either initial CMA), then are "updated" Comparative Market Analysis will be prepared, again as CWP's expense, using the come procedure outline above. The applical CMA will explicitly take into account any changes in local market conditions for comparable properties unaffected by the wind project, as well as any improvements to you're beene or loc

Canastota Wind Power LLC

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Confidential

page i

In the event that the property has been listed for at least 18 months and relie for less than the market value determined by the agelated CMA average, CWP will pay the difference in value within 30 days after closing of the sale of the property. The \$8-month histing requirement may be waited by CWP if requested by the property owner at CWP's sole discretion.

If the property has an updated CMA average market value of \$100,000, and the property has been offered for sale for at least 18 months with the best price accepted in \$80,000, then the property owner will be eligible to receive \$20,000 from CWP.

#### 3 Other zipulations:

Agreed and accepted by:

- The property owner hereby grants CWP the right to purchase the property at the greater amount of the ignorised CMA average market value or the highest bona fide offer
- In the event the property was affered for sale and did not sell or generate any acceptable bona fide efforts within 18 months. CWP will pay the difference in value between the appliced CMA averaged market value and the highest bona fide offer, but only upon reasonable certification by the property owner's selling agent that the lack of an acceptable offer or sale was attributable solely to the close proximity of this property to the wind farm, and not due to any other reation whatsoever including but not limited to market conditions or specific deficiencies related to the property that was otherwise assumed to be satisfactory.
- If the property does not sell during the 18-month period, CWP will have the option, in its sole discretion, to purchase the property at the appliced CMA average market value.
- 4. Subject to CWP's eight to waive any or all of these exclusions, the plan outlined herein does not cover a sale or transfer of the property under any of the following conditions:
  - a) If the property owner does not have clear and marketable title, or there is evidence of unforetzen structural deficiencies, radon problems, pest infestations or hazardesis waste.
  - b) If the property has not been listed for sale for at least 18 months as a continuous period.

c) If the property is gifted or assigned to another person.

- d). If the property is sold pursuant to a foreclosure, bankruptcy of condemnation.
- 6) If the property is not listed for sale in accordance with by above at some point during the time period of Juse 1, 2001 through May 31, 2004.
- If the property is destroyed or significantly damaged by fire or other easualty
- If the property is not reasonably maintained in its current condition, reasonable wear and tear excepted.
- li) If the property has been modified with outbuildings, trailers or signs that tend to degrade the property
- 5. A property owner can participate voluntarily in this plan, under the terms and conditions established herein, but the benefit is not assignable to new or subsequent property owners.
- 6. CWP may usaga, transfer, pledge, or otherwise dispose of its rights and interests under this agreement with only prior written notice to property owner. At the request of CWP, property owner shall cooperate with respect to execution of reasonable and customary documents pertaining to such assignment.

Date:

	Canastota Wind Power LLC	
04/02/01	Confidential	page ?

Not Reported in N.W.2d Not Reported in N.W.2d, 1993 WL 165663 (Minn.App.) (Cite as: Not Reported in N.W.2d)

SHORT, Judge.

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Cook v. Goodhue County Co-op Elec. Ass'nMinn.App., 1993.Only the Westlaw citation is currently available. NOTICE: THIS OPINION IS DESIGNATED AS UNPUBLISHED AND MAY NOT BE CITED EXCEPT AS PROVIDED BY MINN, ST. SEC. 480A.08(3).

Court of Appeals of Minnesota. Keith R. COOK, et al., Respondents, ν.

GOODHUE COUNTY COOPERATIVE ELECTRICAL ASSOCIATION, Appellant. No. C5-92-2137.

> May 18, 1993. Review Denied July 15, 1993.

Appeal from District Court, Goodhue County; Raymond Pavlak, Judge.

Thomas E. Wolf, David J. Jones, O'Brien, Ehrick, Wolf, Deaner & Maus, Sixth Floor, Rochester, for appellant. Sharon L. Van Dyck, Michael A. Zimmer, Schwebel, Goetz, Sieben & Moskal, Minneapolis, for respondents.

Considered and decided by RANDALL, P.J., and SHORT and AMUNDSON, JJ.

#### UNPUBLISHED OPINION

\*1 Keith and LeAnn Cook (farmers) purchased electrical power from the Goodhue County Cooperative Electrical Association (coop) for the operation of their dairy farm near Kenyon, Minnesota. The farmers claimed serious financial damages due to the introduction of neutral-to-ground (stray) voltage from the coop's electrical transmission lines. A jury found the coop 90% at fault and awarded the farmers \$450,000 in damages. The trial court denied all posttrial motions. On appeal, the coop argues the trial court erred in denying its motions for: (1) judgment notwithstanding the verdict; (2) a new trial; and (3) remittitur.

DECISION .

We affirm.

T.

On appeal from an order denying a motion for judgment notwithstanding the verdict, we must determine whether there is any competent evidence reasonably tending to sustain the verdict. Seidl v. Trollhaugen, Inc., 305 Minn. 506, 507, 232 N.W.2d 236, 239 (1975). We review the evidence in the light most favorable to the prevailing party. B.F. Goodrich Co. v. Mesabi Tire Co., 430 N.W.2d 180, 182 (Minn.1988). Unless we determine the evidence is practically conclusive against the verdict, or reasonable minds could only reach a conclusion against the verdict, the trial court's denial of the motion for judgment notwithstanding the verdict should stand. Bisher v. Homart Dev. Co.,

http://by117fd.bay117.hotmail.msn.com/cgi-bin/getmsg?curmbox=00000000%2d0000%2d... 4/6/2007 328 N.W.2d 731, 733 (Minn.1983).

The coop argues the evidence does not support the jury's finding that stray voltage caused the farmers' problems. We disagree. The record demonstrates: (a) the farmers testified both the cows' strange behavior and the amount of voltage appearing on the voltage meter in the milking parlor subsided only after their neighbor's fans were shut off; and (b) the farmers' expert testified 90% of the stray voltage was due to off-farm sources and only 10% was due to on-farm sources. While there was contrary testimony from the coop's expert, it is for the jury to weigh the expert witnesses' credibility. Shymanski v. Nash, 312 Minn. 304, 308, 251 N.W.2d 854, 857 (1977). these facts, there is competent evidence reasonably tending to sustain the verdict.

The coop also argues it is entitled to judgment notwithstanding the verdict because the trial court erred in allowing the jury to determine whether the coop had the duty to warn the farmers of the dangers of stray voltage. trial court instructed the jury in part: The violation of a duty owed to another to use reasonable care may include, among other things, the duty of an electrical cooperative association, such as defendant, to warn its customers who are dairy farmers of the fact that when electricity is distributed to and used for dairy operations, stray voltage may be generated which may adversely affect the dairy cows. Such a duty to warn may arise when an electrical cooperative association knows, or reasonably could believe or discover, that stray voltage can be generated which can adversely affect dairy cows. Whether or not a duty has been violated depends upon the risks of the situation, the dangers known or reasonably to have been foreseen, and all of the existing circumstances.

\*2 Generally, the existence of a legal duty is an issue for the court to determine as a matter of law. Larson v. Larson, 373 N.W.2d 287, 289 (Minn. 1985). Whether a duty is owed can depend on whether the injury was reasonably foreseeable or probable. Oswald v. Law, 445 N.W.2d 840, 842 (Minn.App.1989), pet. for rev. denied (Minn. Nov. 15, 1989). In close cases, the issue of foreseeability is for the jury to decide. Id.

The instruction at issue erroneously implies the jury was to determine whether a duty existed. However, we find no reversible error because the determination of a duty in this case was based on the issue of foreseeability, which is within the jury's province to decide. See Quam v. General Accident Ins. Co. of N. Am., 411 N.W.2d 270, 272 (Minn.App.1987) (this court will not overturn an instruction that, taken as a whole, conveys to the jury the correct statement of the law). Viewing the evidence in the light most favorable to the verdict, we cannot say the evidence is practically conclusive against the verdict or reasonable minds can reach only one conclusion.

II.

When reviewing a denial of a motion for a new trial, we consider whether the denial involved the violation of a clear legal right or a manifest abuse of judicial discretion. Hertz v. Hertz, 304 Minn. 144, 146, 229 N.W.2d 42, 44 The coop argues the trial court abused its discretion by: (a) striking three dairy farmers from the jury panel; (b) allowing attorney misconduct during closing argument; and (c) committing various evidentiary errors at trial. We disagree.

First, the coop failed to make a motion to stay proceedings before the jury panel was sworn in under Minn.R.Gen.Pract. 313. That rule provides the only recourse to challenge the trial court's decision to exclude three potential jurors on the basis of hardship. Under these circumstances, we find no abuse of discretion based on alleged errors in the composition of the jury panel.

Second, the coop failed to provide an adequate record for review of the Apparently, the final arguments were not recorded. closing argument. addition, the coop has not specifically identified what was said and why the Thus, the record before us is insufficient to find argument was prejudicial. an abuse of the trial court's discretion. See McCarthy Well Co. v. St. Peter Creamery, Inc., 389 N.W.2d 514, 519-20 (Minn.App.1986) (record insufficient to find abuse of discretion where part of transcript missing, parties disagreed on facts, and no approved statement of proceedings under Minn.R.Civ.App.P.

110.03 was provided to reviewing court), aff'd in part, rev'd in part on other grounds, 410 N.W.2d 312 (Minn.1987).

And third, the trial court's evidentiary rulings do not constitute a clear abuse of discretion. See Jenson v. Touche Ross & Co., 335 N.W.2d 720, 725 (Minn.1983) (evidentiary rulings will be reversed only where trial court clearly has abused its discretion). The record demonstrates: (a) the testimony of the coop's former general manager was relevant to the issue of the coop's knowledge of the existence of stray voltage; (b) there was insufficient foundation to permit the drawing of the bus bar; and (c) the coop's request to depose the farmers' expert witness was inexcusably late. Under these facts, we find no abuse of discretion in the trial court's evidentiary rulings.

III.

\*3 The coop also argues the trial court erred in denying its motion for remittitur and in allowing the farmers to present damages regarding the establishment of a dairy operation in a different location. We disagree. The record demonstrates: (a) the award of \$450,000 is supported by the testimony of the farmers' expert witness; and (b) the farmers' land was an unsafe location for a dairy farm due to stray voltage. Under these facts, the jury award is not manifestly contrary to the evidence and the trial court's failure to set aside the verdict does not result in a plain injustice. See Hughes v. Sinclair Mktg., Inc., 389 N.W.2d 194, 199 (Minn.1986) (on appeal, jury's award of damages will not be disturbed unless failure to do so would be shocking or would result in plain injustice); Stuempges v. Parke, Davis & Co., 297 N.W.2d 252, 256 (Minn.1980) (jury verdict will be disturbed only if it is manifestly and palpably contrary to the evidence).

Affirmed.

Minn.App., 1993. Cook v. Goodhue County Co-op Elec. Ass'n Not Reported in N.W.2d, 1993 WL 165663 (Minn.App.)

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